

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-53. (canceled)

54. (currently amended) A method for transplanting into a subject a viable xenogeneic cell or tissue comprising:

(a) transplanting the cell or tissue into the subject, wherein the cell or tissue is surrounded by a semipermeable membrane that is impermeable to immunoglobulins; and

(b) treating the subject with a prophylactically effective amount of an agent which inhibits an immune system costimulation event mediated by a cell surface molecule selected from the group consisting of B7, CD28, or CTLA4, ~~GP39, CD40 and CD4~~, so as to inhibit the destruction of the transplanted cell or tissue by the subject's immune system.

55. (currently amended) The method of claim 4854, wherein the semipermeable membrane comprises polylysine-alginate.

56. (currently amended) The method of claim 4854, wherein the semipermeable membrane is a microcapsule.

57. (currently amended) The method of claim 4854, wherein the semipermeable membrane is double-walled.

58. (currently amended) The method of claim 4854, wherein the agent is CTLA4.

59. (currently amended) The method of claim 4854, wherein the agent is CTLA4Ig.

60. (canceled)

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61. (canceled)

62. (currently amended) The method of claim 4854, wherein the subject is a mammal.

63. (currently amended) The method of claim 4854, wherein the subject is selected from the group consisting of a cow, a calf, a pig, a sheep, a lamb, a horse, a chicken and a human.

64. (currently amended) The method of claim 5763, wherein the subject is a human.

65. (currently amended) The method of claim 4854, wherein the xenogeneic donor is a mammal.

66. (currently amended) The method of claim 5965, wherein the mammal is selected from the group consisting of a pig, a cow, a calf, a sheep, a lamb and a human.

67. (currently amended) The method of claim 4854, wherein the viable cell or tissue secretes a hormone which promotes growth in an animal.

68. (currently amended) The method of claim 4854, wherein the viable cell or tissue comprises an endocrine cell or tissue.

69. (currently amended) The method of claim 6268, wherein the endocrine cell or tissue is selected from the group consisting of an insulin-producing cell or tissue, a hepatocyte or hepatic tissue, a parathyroid cell or tissue and a pituitary cell or tissue.

70. (previously presented) A method for transplanting into a subject a viable xenogeneic cell or tissue comprising:

(a) transplanting the cell or tissue into the subject, wherein the cell or tissue is surrounded by a semipermeable membrane that is impermeable to immunoglobulins; and

(b) treating the subject with a prophylactically effective amount of CTLA4Ig, so as to inhibit the

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destruction of the transplanted cell or tissue by the subject's immune system.